

## Title of your tutorial\*

Designing Immersive Experiences in ShapesXR

## Tutorial Team (names and short bios):\*

Dr Marco Gilardi is a lecturer in Creative Computing Technologies at the university of the west of Scotland. Dr Gilardi holds a PhD in 3D interactive applications from the University of Sussex. His research focuses on applications of extended reality (XR) to education, training, and cultural heritage. Dr Gilardi has extensive experience in knowledge transfer and was awarded the Scottish Knowledge Transfer Heroes Award in 2022 by Interface.

Dr Mohammed Soheeb Khan is a Senior lecturer and a researcher in the area of Virtual Reality, 3D Visualisation, and Computer Games at UWS. Dr Khan has extensive experience in designing and developing simulators, applications, visualizations, and interactive content for education, research, and training purposes funded by EPSRC, RCPSG, RCSEd, NHS, ARUK, and NHS Education Scotland (NES)

Mr Luke Beveridge holds an MRes in AI from the University of the West of Scotland (UWS), and is a PhD candidate in the UWS Creative Computing Technologies Research Group. His research focuses on design processes for extended reality applications and how these are applied to industrial training, with an interest in serious games and AI to support learning and content generation.

## Abstract of your tutorial (about 250 words including the motivation and objectives)\*

Developing ad-hoc solutions for immersive education is a complex iterative process that can be made smoother by a better understanding of needs of educators by designers and developers and design and development processes by educators.

This tutorial aims to bridge the gap between educators and extended reality (XR) designers, by giving participants insight on design and prototyping of immersive education experiences.

In this full-day hands-on tutorial session you will learn to design and prototype your own immersive learning experience. We will step-through the design process: ideation, paper prototyping, and prototyping in VR using ShapesXR.

In the morning, after an overview of the design process we will adopt, we will move into an ideation workshop followed by an introduction to paper prototyping.

After lunch, we will introduce ShapesXR and move into an hands-on 3D prototyping VR workshop for the remainder of the afternoon.

By the end of this tutorial participants will:

- 1) Have an understanding of design processes for XR
- 2) Have an understanding of requirement collection
- 3) Have an understanding of the ideation process
- 4) Be able to draw 360 paper prototypes and visualise them in 360.
- 5) Be able to create low-fi 3D prototypes using ShapesXR

Participants should bring their own laptop